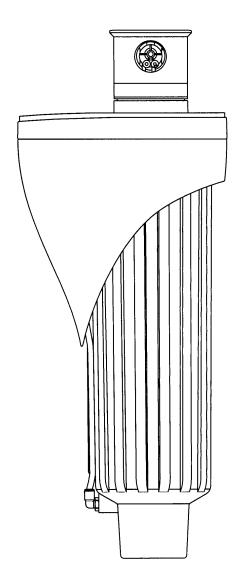


# **Brief Operating Manual**

**Pop-up Sprinklers** 

Models: Hydra S

**PERROT** 



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#### 1 Safety

This operating & safety manual contains fundamental advice to be heeded during installation and operation. It is therefore imperative that the fitter and relevant engineer / operator read this manual thoroughly prior to commissioning and operation.

Please follow both the general safety instructions specified in this 'Safety' section and the specific safety warnings included in other sections.

#### 1.1 How instructions are marked in this manual

Safety instructions that, if ignored, could endanger human life or limb are marked with the general "danger" symbol:

"Warning" is printed next to instructions that, if ignored, could be hazardous to the sprinkler and its operation.

WARNING

#### 1.2 Hazards of ignoring safety instructions

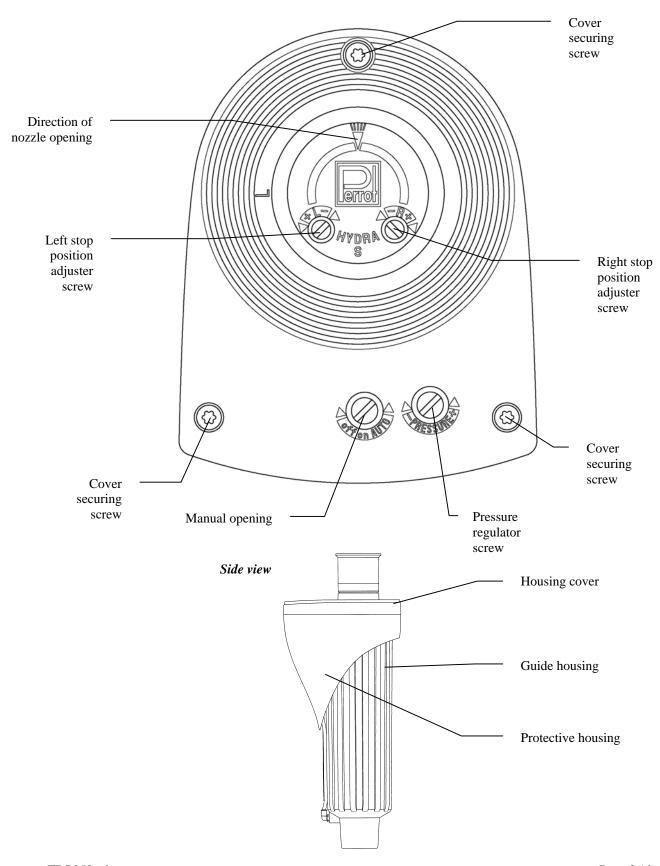
Failing to heed the safety instructions may result in danger to life and limb, harm to the environment and/or damage to the device. Failing to heed the safety instructions may lead to the loss of any right to claim compensation.

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# 2 Description

#### View from above



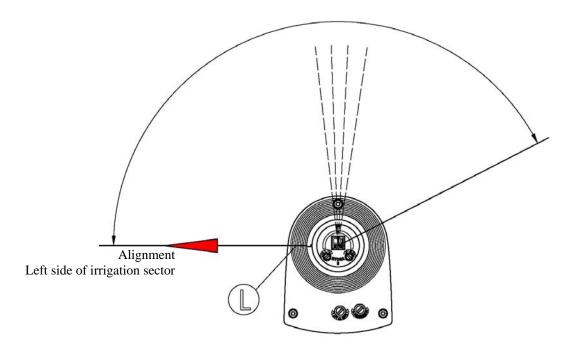
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#### 3 Installation

- Thoroughly flush the pipeline before installing the sprinkler
- ☆ Seal connecting thread with Teflon tape.
- Note: Part-circle sprinklers must be set up in such a way that the ' □' mark is aligned in a straight line from the left side of the irrigation sector.



#### 4 Commissioning

(For valve-in-head sprinklers)

- a) Check electrical function:
  - Before opening water supply to the sprinkler, activate coil via the control module. The sound of a 'click' on the coil lets you determine if the sprinkler's electrical function is working correctly (the click is caused by the rotor being activated).
- b) Make sure that 'Manual opening' is set to AUTO (turn screw for 'Manual opening' round to the left as far as it will go).
  - On this setting, whenever it is not switched on the sprinkler is guaranteed to close following the supply of water.
- c) Slowly open water supply to the valve until operating pressure is present. The sprinkler may briefly open but should then close automatically after no more than 30 seconds.
- d) Once the water supply is open and the maximum operating pressure has been reached, check sprinkler and connection for leaks.

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e) Check sprinkler is working flawlessly:
Open sprinkler using 'Manual opening' by turning the screw for 'Manual opening' to
the position between AUTO and OFF (approx. 1 revolution). Sprinkler head rises and
begins to rotate.



#### Do not stand facing the nozzle opening!

Set desired output pressure by turning the 'Pressure regulator screw' to the right (-) as far as it will go (minimum pressure). The output pressure is now set to approximately 3 bar. If you turn the 'Pressure regulator screw' one complete revolution to the left (+), the output pressure will go up by 1 bar.

- f) Close 'Manual opening' and put in the AUTO position (see point 4b). Sprinkler should stop the throughflow of water within 30 seconds.
- g) Perform steps e) and f) again repeatedly until this functions are flawlessly.
- h) Check again that the sprinkler is working correctly by starting it electrically from the control module.

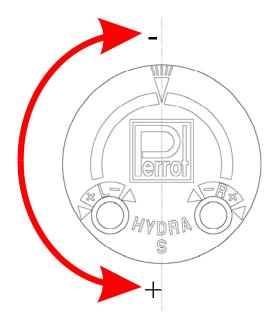
## 5 Setting irrigation sector

(Part-circle sprinklers only)

☆ Set the left side stop position using:



Left stop position can be adjusted by  $\pm -90^{\circ}$ 



#### Note:

One complete revolution of the adjuster screw adjusts the sector stop position by 60°

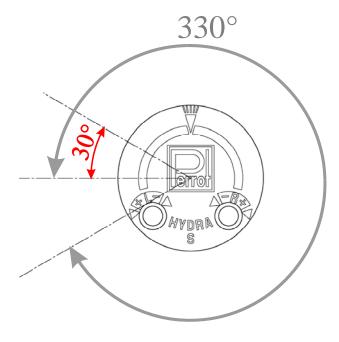
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☆ Set right side stop position using:



Right stop position can be set to a watering sector of 30° to 330°.



Note: Sprinkler is generally delivered with a preset irrigation sector of 180°. In order to shorten the time for setting the irrigation sector, the sprinkler head can be turned manually to the end of the rotating direction.

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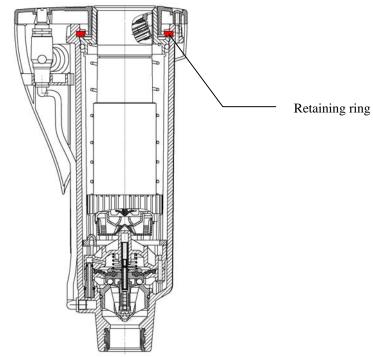


## 6 Replacing the nozzle

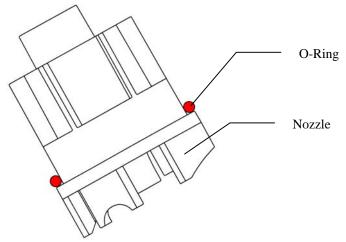


## Ensure sprinkler is not under pressure.

- ☆ Loosen all 3 of the cover's securing screws and remove cover.
- ★ Using a screwdriver, remove white retaining ring.



- ☆ Pull sprinkler insert out of the housing
- ☆ Take off sprinkler head cover by levering the cover up at the notch using a small screwdriver.
- Rotate nozzle to the left using pliers and then pull out.
- ☆ Put O-ring over the new nozzle



and, reversing the procedure, re-install in the sprinkler head.

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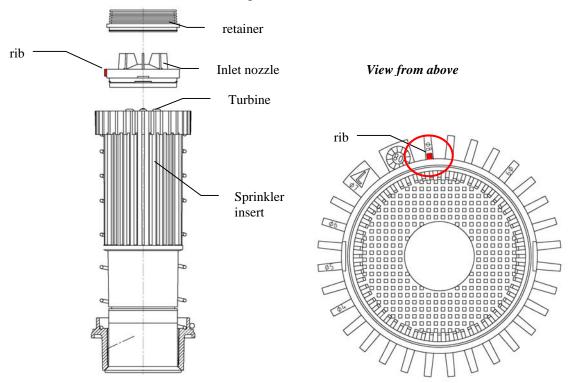
Fit cover into sprinkler head's snap-in connection by first pushing it as far as it will go against the side of the nozzle and then snapping it completely into place on the opposite side of the nozzle.



## 6.1 Adjusting the inlet nozzle

The recommended rotational speed is maintained by correctly adjusting the inlet nozzle. Adjust as follows:

- ☆ Take off inlet nozzle and filter together by using a screwdriver to lever up the inlet nozzle at the notch.
- Snap inlet nozzle back onto the sprinkler module so that the elongated rib is pointing to the nozzle diameter being used.



Note: If you want a higher rotational speed, the rib must be pointing to a smaller diameter than that of the nozzle actually being used.

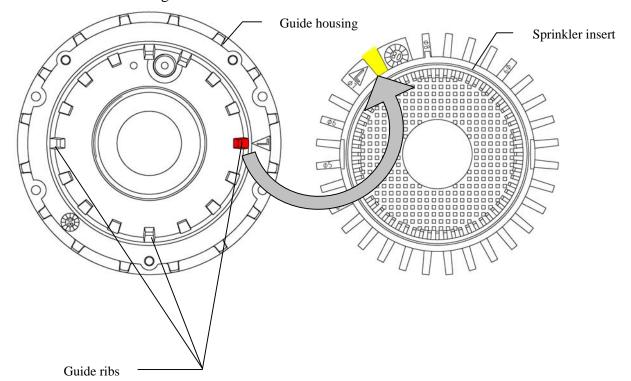
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## 6.2 Fitting the sprinkler insert

- ☆ Fit O-ring onto flange and lightly grease for easier assembly.
- ☆ Fit sprinkler module inside housing. Note: Ensure correct alignment.



- ☆ Push flange down into the housing.
- ☆ Fit retaining ring.

Note: Retaining ring must be fully inserted into the slot.

- ☆ Secure housing cover using all three screws.
- ☆ Check sprinkler is working properly as per points 4b-4e.

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